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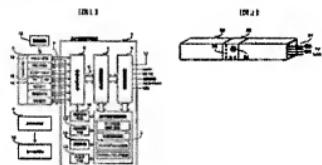
**Abstract:**

PROBLEM TO BE SOLVED: To provide a central information management system that utilizes remote control so as to functionally manage a plurality of subscriber information apparatuses. SOLUTION: The system totally managing the plurality of subscriber information apparatuses, includes: an information terminal 3 capable of selectively receiving many multimedia information items; an information distribution means 4 for distributing the selectively received multimedia information to the subscriber information apparatuses; an information branch means 5 for distributing the distributed information to the subscriber information apparatuses 18 or the like corresponding to each room through subscriber wires 6, 7; a power supply control means that totally controls respective power supplies of the plurality of subscriber information apparatuses in each of the rooms 8, 9, 10 in order to save power; a remote control means 13 used for totally remote controlling the plurality of the subscriber information apparatuses in each room by a mobile terminal 11 carried by each person; and a central control management means 2 comprising a computer system controlling each of the subscriber information apparatuses through a

communication channel access by a LAN or the like and totally managing them.

47-404-17466 (P2003-17B3)

1. 本発明は、家庭の各部屋に設けられた複数の情報機器に対する	1. リモコン受信部
セレクションリクエストが来たときに、各機器を操作するリモコンコード	2. 電源供給部
を用いて、各機器を操作するリモコンコードを各機器に送り、各機器	3. 情報選択部
が各機器を操作するリモコンコードを各機器に送り、各機器	4. 情報配布部
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が各機器を操作するリモコンコードを各機器に送り、各機器	10. リモコン受信部
が各機器を操作するリモコンコードを各機器に送り、各機器	11. 情報選択部
が各機器を操作するリモコンコードを各機器に送り、各機器	12. 情報配布部
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が各機器を操作するリモコンコードを各機器に送り、各機器	14. リモコン受信部
が各機器を操作するリモコンコードを各機器に送り、各機器	15. 情報選択部
が各機器を操作するリモコンコードを各機器に送り、各機器	16. 情報配布部
が各機器を操作するリモコンコードを各機器に送り、各機器	17. 電源供給部
が各機器を操作するリモコンコードを各機器に送り、各機器	18. リモコン受信部
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が各機器を操作するリモコンコードを各機器に送り、各機器	20. 情報配布部
が各機器を操作するリモコンコードを各機器に送り、各機器	21. リモコン
が各機器を操作するリモコンコードを各機器に送り、各機器	22. 電源供給部
が各機器を操作するリモコンコードを各機器に送り、各機器	23. リモコン
が各機器を操作するリモコンコードを各機器に送り、各機器	24. 電源供給部



### JPO Machine translation abstract:

#### (57) Abstract

**SUBJECT** The system which utilizes remote control and manages the information machines and equipment in a house functionally is built.

**Means for Solution** The information terminal equipment 3 which is a system which carries out batch management of two or more information devices which can be set in a house, and can carry out selection reception of much multimedia information, The information dispensing means 4 which carries out distribution distribution of the multimedia information which carried out selection reception at information machines and equipment in a house, The information branching device 5 which carries out branching distribution of the information distributed to corresponding information-machines-and-equipment 18 grade in a house in each room via the wiring 6 and 7 in a house, A power control means which controls in generalization a power supply of each rooms 8 and 9 and two or more information machines and equipment in a house of each, which can be set in ten, in order to attain power-saving, The remote control means 13 which carries out remote control of two or more information machines and equipment in a house of each which can be set in each room in generalization with the portable device 11 which an individual carries, It has the concentrated control management tool 2 which comprised a computer system which controls each information machines and equipment in a house by communication line connection, such as LAN, and carries out central control.

### Claim(s)

**Claim 1** A system which carries out batch management of two or more information devices, such as Internet TV which performs video delivery through the Internet characterized by comprising the following by CATV in houses in an office or a home etc., VOD (video on demand), and multicasting. Information terminal equipment which can carry out selection reception of much multimedia

information, such as CATV which needs conditional receiving functions, such as ID check, VOD, and Internet TV.

An information dispensing means for carrying out distribution distribution of the multimedia information which carried out selection reception with said information terminal equipment at corresponding information machines and equipment in a house.

An information branching device for carrying out branching distribution of the information distributed to corresponding information machines and equipment in a house in each room by said information dispensing means via wiring in a house.

A power control means which controls in generalization a power supply of two or more information machines and equipment in a house of each, which can be set in each room via wiring in said house, in order to attain power-saving, A remote control means which carries out remote control in generalization with a portable device provided with a remote control function in which an individual carries peripheral equipment connected to two or more information machines and equipment in a house of each which can be set in said each room, and the information machines and equipment concerned, A concentrated control management tool which controlled two or more information machines and equipment in a house of each which can be set in said each room by communication line connection, such as LAN, coordinated with said each means, and comprised a computer system which carries out central control.

**Claim 2**The concentration information management system according to claim 1, wherein said power control means is provided with a function to coordinate with said concentrated control management tool in order to stop standby power requirement, to switch on a power supply before transmission and reception of information to each information machines and equipment in said house, and to turn off the power after transmission and reception of information.

**Claim 3**The concentration information management system according to claim 1 having a monitor means which supervises a situation of each of said room based on information on various sensitivity sensors, such as a surveillance camera, smoke, gas, and temperature, in addition to said each means.

**Claim 4**Said remote control means receives a remote control signal by infrared rays or a radio wave sent from said portable device with a remote control signal receiving set, and transmits it to said concentrated control management tool, The concentration information management system according to any one of claims 1 to 3, wherein said concentrated control management tool controls by transmitting a remote control signal to information machines and equipment in the house concerned which decoded an inputted remote control signal and of which operation was required by communication line connection, such as LAN.

**Claim 5**Said concentrated control management tool is provided with a location registration function which detects movement of said portable device registered for every individual via said remote control signal receiving set, The concentration information management system according to claim 4 controlling by this location registration function according to contents which set up beforehand information machines and equipment in a house in said each room according to movement of said portable device.

**Claim 6**An operation history of a registrant individual who controlled each information machines and equipment in a house based on information from which said concentrated control management tool was acquired by said remote control means and a monitor means, The concentration information management system according to any one of claims 3 to 5 provided with an intelligence function and a scheduling function which are made to reflect in various operations which conduct behavior analysis, such as liking, and taste analysis, and include automation of each information machines and equipment in a house.

**Claim 7**The concentration information management system according to any one of claims 1 to 6 receiving information from information machines and equipment in a house that said concentrated control management tool detects an individual's operation information via said remote control means, equip with a health check sensor, and detected information is transmitted, and performing an individual's health care.

**Claim 8**Said information branching device allots an electric socket which connects a cable etc. to a wall surface, The concentration information management system according to any one of claims 1 to 3 allocating in Kabeuchi a long picture type tubular wiring member which can accommodate

many cables etc. collectively, and wiring various information machines and equipment in a house via an electric socket of each room through said tubular wiring member from said electric socket in each cable.

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### Detailed Description of the Invention

#### 0001

**Field of the Invention** This invention relates to the various functions concentration information management system which carries out central control of the information machines and equipment in a house of much multimedia correspondences.

#### 0002

**Description of the Prior Art** In paid broadcasting, such as the former, a CATV system, BS broadcasting, and CS broadcasting, Only the specific television viewer who contracted with the broadcasting organization cancels the scramble of broadcast on which scramble is hung, and conditional limited reception or a conditional access function (CA function) is realized as a function to enable it to view and listen to the broadcast. Such a CA function enciphers the video signal and audio signal of broadcast using a scramble key (scramble), The viewing-and-listening contractor is a mechanism in which the scramble of broadcast which received is canceled, and it can view and listen to actual broadcast by the set top box (a tuner, a decoder, etc. may be called) distributed by the broadcasting organization.

**0003** These days, the system etc. which can view and listen to various kinds of broadcasts by the rather than thing for which CA function is mounted in an IC card and an IC card is substituted according to an entrepreneur are developed for every entrepreneur who digitization is promoted and is building the CATV system using the separate set top box. Various home server systems etc. which are total and furthermore manage these information machines and equipment and home electronics are announced.

#### 0004

**Problem(s) to be Solved by the Invention** However, although the above-mentioned conventional technology described reception of the image sound information by CATV used, for example in a house, While multimedia information etc. increase these days, an increase of the information machines and equipment used for every each part store also in a house (inside of an office and a home, etc.) is enhanced, The cable used since it is a situation where CATV etc. are only one in such an information channel and a data system differs from a protocol etc. for every such information channel, respectively, and the number of connectors also increase, When extreme, there is a problem said that the situation where it is occupied by the cable and a place left to stand does not have above the floor level has occurred. If all the information channels were independently furnished for every room in a house, There is a problem referred to as that the viewpoint of information use to utilization efficiency is bad, and cannot build the relation negotiation of the width between each part stores, etc. easily in the same house, and when it is CATV, One license is supplied to one set top box (tuner may be called) in many cases, and there is a problem that CATV is seen only in the room where it has the set top box. if \*\* (short) distance radio, such as wireless LAN and Bluetooth, etc. will come to be included in home electronics from now on, the problem of the power consumption at the time of standby also needs to surface, and also with careful attention to the effective use of resources and the generating problem of CO<sub>2</sub> in earth environment, it is necessary to aim at energy saving more

**0005** Then, this invention utilizes a remote control system, carries out central control of the multimedia information and information machines and equipment in a house, and distributes and provides multifunctional service in each part store, and. Power-saving is attained by controlling the power supply of each information machines and equipment in generalization, the wiring mechanism which can store collectively many cables of each information channel containing a power connector is functionally allocated in Kabeuchi, and extension of a cable etc. and reduction are also aimed at providing a possible concentration information management system.

#### 0006

**Means for Solving the Problem** The invention according to claim 1 is provided with the following. CATV in houses in an office or a home etc., VOD (video on demand), It is a system which carries out batch management of two or more information devices, such as Internet TV which performs

video delivery through the Internet by multicasting, Information terminal equipment which can carry out selection reception of much multimedia information, such as CATV which needs conditional receiving functions, such as ID check, VOD, and Internet TV.

An information dispensing means for carrying out distribution distribution of the multimedia information which carried out selection reception with said information terminal equipment at corresponding information machines and equipment in a house.

An information branching device for carrying out branching distribution of the information distributed to corresponding information machines and equipment in a house in each room by said information dispensing means via wiring in a house, A power control means which controls in generalization a power supply of two or more information machines and equipment in a house of each, which can be set in each room via wiring in said house, in order to attain power-saving, A remote control means which carries out remote control in generalization with a portable device provided with a remote control function in which an individual carries peripheral equipment connected to two or more information machines and equipment in a house of each which can be set in said each room, and the information machines and equipment concerned, A concentrated control management tool which controlled two or more information machines and equipment in a house of each which can be set in said each room by communication line connection, such as LAN, coordinated with said each means, and comprised a computer system which carries out central control.

The invention according to claim 2 is characterized by having a function for said power control means to coordinate with said concentrated control management tool in order to stop standby power requirement, and to switch on a power supply before transmission and reception of information to each information machines and equipment in said house, and to turn off the power after transmission and reception of information. The invention according to claim 3 is characterized by having a monitor means which supervises a situation of each of said room based on information on various sensitivity sensors, such as a surveillance camera, smoke, gas, and temperature, in addition to said each means.

**0007**Said remote control means receives a remote control signal by infrared rays or a radio wave sent from said portable device with a remote control signal receiving set, and transmits the invention according to claim 4 to said concentrated control management tool, It is characterized by said concentrated control management tool controlling by transmitting a remote control signal to Information machines and equipment in the house concerned which decoded an inputted remote control signal and of which operation was required by communication line connection, such as LAN. The invention according to claim 5 is provided with a location registration function for which said concentrated control management tool detects movement of said portable device registered for every individual via said remote control signal receiving set, It is characterized by controlling by this location registration function according to contents which set up beforehand information machines and equipment in a house in said each room according to movement of said portable device.

**0008**An operation history of a registrant individual by whom the invention according to claim 6 controlled each information machines and equipment in a house based on information from which said concentrated control management tool was acquired by said remote control means and a monitor means, Behavior analysis, such as liking, and taste analysis are conducted, and it is characterized by having an intelligence function and a scheduling function which are made to reflect in various operations including automation of each information machines and equipment in a house. The invention according to claim 7 is characterized by receiving information from information machines and equipment in a house that said concentrated control management tool detects an individual's operation information via said remote control means, equips with a health check sensor, and transmits detected information, and performing an individual's health care. The invention according to claim 8 allots an electric socket by which said information branching device connects a cable etc. to a wall surface, A long picture type tubular wiring member which can accommodate many cables etc. collectively is allocated in Kabeuchi, and it is characterized by wiring variety-of-information apparatus via an electric socket of each room through said tubular wiring member from said electric socket in each cable.

**0009**

**Embodiment of the Invention**Hereafter, an embodiment of the invention is described with

reference to figures. Drawing 1 is a lineblock diagram of the concentration information management system concerning an embodiment of the invention. Drawing 2 is a figure showing the wiring member of the information branching device shown in drawing 1.

**0010**In drawing 1, 1 is a centralized information management device which carries out batch management of the information in the houses in an office or a home etc. according to a computer system. 2 is a concentrated control management tool and performs central control, such as selection reception of the information on the various channels of CATV, VOD (video on demand), Internet TV that performs video delivery through the Internet by multicasting, etc., and power control for the information control of the distribution in a house, and power saving. 15 is an input output means for the display which the concentrated control management tool 2 uses for control and surveillance, and various setting out which performs concentrated control management. 3 is information terminal equipment, such as a set top box, an IC card etc. perform selection reception for every reception channel, and the image etc. which were received here are distributed to TV monitor of each part store, etc. Although CATV, BS/CS, a public line, the Internet, and VOD are illustrated as each channel, it is what was divided and described according to data for convenience, and there is also a case superimposed on CATV like VOD service in practice.

**0011**In 4 is an information dispensing means, for example, the information terminal equipment 3 by CATV reception, As opposed to connecting the coaxial cable drawn in the house from the fiber-optic network, performing signal processing, such as a releasing scramble, and outputting a television signal, Information distribution of the information on the Internet passing the information terminal equipment 3, connecting it to the cable modem for CATV within the information dispensing means 4 with a coaxial cable, and connecting with a LAN cable between a cable modem and an apparatus terminal is performed.

**0012**5 is wiring in a house which connects the information dispensing means 4 and the information branching device 5, and a coaxial cable, LAN cables (10-/100BASE-T etc.), an IEEE1394 cable, a USB cable, single track, etc. are used according to the kind of information machines and equipment in a house. These mainly comprise a bidirectional transmission type. 5 is an information branching device and constitutes the main part of the wiring in a house. For example, Kabeuchi of the room is piped in the tubular wiring member 20 which stores the various cables 21 collectively to an inside as shown in drawing 2, It attaches so that the connector 23 for cable connection and the electric socket board 22 which has arranged the connector 24 grade for power cables may be exposed on the foot stall inside the room, and the cable connector from the wiring 6 side in a house is connected with the connectors 23 and 24 on the electric socket board 22, and wiring to the information machines and equipment of each part store is performed. The wiring member 20 can be freely detached and attached for every small block of electric socket board 22 grade, and it is constituted so that easily **addition of the distribution cable 21 and \*\*\*\* construction .** 7 is the cables stored by the wiring member 20 piped by Kabeuchi, and shows the wiring for information machines and equipment which constitutes wiring to the information machines and equipment of each part store, and wiring of the power supply (power line).

**0013**8 is a room of room NO1 and as information machines and equipment in a house The TV monitor 18, PC (personal computer) terminal, A surveillance camera, a smoke sensor, a gas sensor, a thermo sensor, various health check sensors, an interphone, TEL-FAX, and remote control receiving set 16 grade are installed. The power cable (power line) which supplies a power supply to each of these information machines and equipment is allocated by the wiring member 20, the power supply of each information machines and equipment is controlled by the power control means 12 in generalization, control management is carried out by the concentrated control management tool 2, and power-saving is made by it so that standby power requirement may be reduced.The individual is carrying the remote control unit for remote control with which the portable devices 11, such as a portable telephone or PDA, were equipped. The rooms 9-10 of other rooms NO2-NOn are considered as the same composition as room NO1.

**0014**As a remote control unit of the portable device 11, it is equipped with the sender of the remote control signal by infrared rays as an example, and it is assumed that the card slot is also attached (card slots are reading and an object for the writing of the recording card for the health check mentioned later).

**0015**For example, if the remote control signal by infrared rays is sent from the portable device 11 when specifying a channel, volume, etc. which are displayed on the TV monitor 18, After receiving

light with the remote control receiving set 16 and changing into an electrical signal, it is transmitted to the concentrated control management tool 2, Signal analysis is conducted by the concentrated control management tool 2, broadcasting channels, such as CATV, VOD, and Internet TV, are chosen if needed, and the electrical signal which orders it operation of channel designation, volume control, etc. via the remote control means 13 is transmitted to the information terminal equipment 3 or the TV monitor 18. In this case, the concentration information control means 2 controls the power supply (power line) of each applicable information machines and equipment, a power supply is switched on before the transmission and reception of information to information machines and equipment if needed, standby power requirement is stopped by turning off the power after the end of transceiver of information, and power-saving is attained.

**0016**Here, the case where the TV monitor 18 cannot receive remote control by communication line connection, such as LAN, directly is explained to an example. The infrared signal transmitter 17 is arranged at the front face of the remote control light-receiving device of the TV monitor 18, If the electrical signal which specifies a change of the channel of a receiver or an external input channel, volume control, etc. with which TV monitor is provided from the concentrated control management tool 2 is transmitted to the infrared signal transmitter 17, The infrared signal transmitter 17 sends channel switching and the infrared remote control signal which specifies volume control, and remote-control operation of the TV monitor 18 by the centralized information management device 1 is carried out. Thus, when it is information machines and equipment which cannot perform remote control by communication line connection directly, the peripheral equipment connected to information machines and equipment or information machines and equipment applicable by passing a communication method and the control machinery for protocol conversion is controlled.

**0017**Operation is explained below. First, if the case where the user of room NO1 views and listens to CATV is taken for an example, A user chooses a program to watch from race cards, such as a broadcasting channel of CATV, VOD, Internet TV, If the key of the remote control unit with which the portable device 11 is equipped is pressed and an infrared remote control signal is sent, the remote control receiving set 16 will receive light, and it will change into an electrical signal, and will transmit to the concentrated control management tool 2. The concentrated control management tool 2 analyzes a remote control signal, finds out the ID number registered into the system, and recognizes it to be a dispatch signal from the portable device 11 of room NO1, The channel of the program for which a user wishes is checked from the program table (it does not illustrate but the same thing as :user's race card is always rewritten) of the memory with which the concentrated control management tool 2 is equipped, The information terminal equipment 3 is ordered the checked channel, it receives, scramble is canceled, and the TV monitor 18 of room NO1 is controlled via the remote control means 13. At this time, transmit the electrical signal which specifies selection of an external channel, volume, etc. to the infrared signal transmitter 17 of the TV monitor 18, an infrared remote control signal is made to send, the TV monitor 18 is operated with an infrared remote control signal, and the program of CATV is received. In this way, by using various kinds of interactive services, the user can receive a desired program from every room. In the case of CATV, the fault of having seen conventionally only in the specific room is cancelable according to 1 set-top-box 1 license.

**0018**In this case, when switching on a power supply and ending program reception conversely, before the concentrated control management tool 2 operates the tuner part (not shown) of the information terminal equipment 3, and the power supply of the TV monitor 18 and sends out control information, after it transmits required information, it is saving the power by turning off and awaiting a power supply and stopping the standby power requirement at the time.

**0019**The concentrated control management tool 2 moves to other rooms on business, while a user views and listens to a sport relay broadcast etc., or, When it goes to a toilet, it has the location registration function for changing as **so that and an important scene may not be overlooked etc. the same program as TV monitor of the place which the user moved automatically** The concentrated control management tool 2 checks user ID, and is specifically supervising the infrared signal from the remote control unit of the portable device 11, If a user moves to a toilet etc., the remote control signal from the RIKOMON receiving set 16 of room NO1 will disappear, Since the remote control signal which contains user ID from the remote control receiving set of a toilet in the remote control receiving set installed in each part store, a toilet, a bathroom, etc. is inputted, The concentrated control management tool 2 turns off the TV monitor 18 of room NO1,

and is realized by the procedure of and passing an identical program. **TV monitor in a toilet** (In addition, of course, such remote control is possible also by a radio wave.) For example, a portable telephone holds the method of the location registration performed by sending an electric wave suitably on a scale of the inside of a house as local location registration, and serves as composition etc. which catch the electric wave of a portable device with the directional antenna of a remote control receiving set, etc.

**0020**The concentrated control management tool 2 creates the viewing history of TV program, etc. for every user, and extracts and analyzes the taste trend of a program, etc., and the intelligence function made to reflect in operation and the scheduling function which records and analyzes an operation history, conducts behavior analysis, and is made to reflect in control of information machines and equipment also have it. For example, when the user always looks at the weather intelligence at 6:50 p.m. every day, even if a user forgets the concentrated control management tool 2 and it does not send a remote control signal, it offers service of at 6:50 p.m., and passing weather intelligence etc. **the TV monitor 18**

**0021**In addition, when a user goes out, it judges by the existence of a remote control signal, and the power supply of unnecessary apparatus is turned OFF automatically. When a user goes home, the monitor means 14 supervises and detects the input from a surveillance camera, a motion sensor, etc., and operation on demand for energy saving of making a power supply one is also performed. When it is preheating of TV monitor, and apparatus into which it is necessary to put a power supply beforehand, such as an air-conditioner, a user's behavior analysis performs synthetic control combining an intelligence function and a scheduling function. When predicting going-home time using the scheduling function by user setting in setting up a hour of rising and using instead of an alarm clock, and switching on a power supply, it is switching on a power supply automatically combining the intelligence function and scheduling function reflecting the user's behavior analysis etc.

**0022**However, although the trial which reduces standby power requirement is made, for example, it may be more convenient for the latest electronic equipment to utilize the timer with which the air-conditioner itself is equipped in an air-conditioner, if the standby power requirement of the whole electronic equipment is added together, it cannot ignore too. Thus, not only information machines and equipment but a kotatsu, an electronic blanket, an electronic carpet, etc., Also in the case of the electrical and electric equipment to preheat beforehand and place, power control is effective, An above-mentioned intelligence function and scheduling function are utilized by installing a power control adapter etc., and, also in the case of kotatsus other than information machines and equipment, an electronic blanket, an electronic carpet, of course, power-saving can be attained in total.

**0023**Next, surveillance business is explained. The concentrated control management tool 2 via the monitor means 14 The image data of a surveillance camera, The data of a smoke sensor, a gas sensor, a thermo sensor, etc. is collected, and image processing of the picture of a surveillance camera is inputted and carried out via a cable as a video data, it is displayed on the monitoring screen of the input output means 15, and supervises an individual's lives, such as a state inside the room, and an invader's existence, and security. It is inputted as an electrical signal, comparison processing is carried out to a reference value, and from the data of a smoke sensor, the data of a smoke sensor or a thermo sensor supervises an outbreak of a fire, the fullness state of poisonous gas, etc., it detects and is careful of the abnormalities in a room temperature from the data of a thermo sensor, and performs an automatic regulation of a central-heating-and-air-conditioning system etc. It may be made for a picture, a sound, a text, etc. to notify to the contact beforehand registered into the case under absence, or the emergency through a public line and the Internet via the information terminal equipment 3.

**0024**Next, about a user's health care, the card which incorporates the data of measuring sensors (health check sensor), such as a pulse, body temperature, and blood pressure, is prepared. A user's body is equipped with a measuring sensor, data is incorporated into a card, and it inserts in the card slot of the remote control unit with which the portable device 11 is equipped, and via the remote control receiving set 16, data is transmitted to the concentrated control management tool 2, and a user's health check is performed. In particular, to an old person etc., periodically, it considers so that a health check may be carried out (for example, twice **of the morning and evening**, etc.). The toilet bowl provided with the urinalysis function and the apparatus which

stored body measurement functions, such as a pulse, body temperature, and blood pressure, in one are also sold to the noncommercial use, and it may be made to connect such apparatus by a direct communication circuit these days other than the combination of the portable device 11 and a card.

**0025**If the portable telephone in which short-distance-radio connection (bluetooth function etc.) is possible, wireless LAN, etc. can use it convenient in the near future, it will also become possible to transmit data to the concentrated control management tool 2 on radio directly from the portable device 11. In that case, transmission of a picture will also be attained if the broadband type portable telephone which has a video telephone function in the portable device 11 is used. For the concentrated control management tool 2, remote control by radio waves, such as wireless LAN, remote control by the radio wave from the concentrated control management tool 2 to each information machines and equipment, etc. become possible instead of infrared remote control.

**0026**Next, it is not a dial-up method called a public line, a modem, or ISDN and TA about connection of the Internet, The method which connects between cable modems with a PC terminal with a LAN cable using the cable modem of CATV, the method which connects with a LAN cable between PC terminals through a telephone line using an ADSL (asymmetric digital subscriber line) modem or a router, etc. are possible. Since both these methods serve as LAN connection, even if it uses how many set PC terminal in each part store, a modem can be managed with one set, and peripheral equipment, such as a printer and a scanner, sharing of a file, etc. are attained between terminals. The concentrated control management tool 2 performs communication management by the modem or a router, share operation management, such as a printer, etc., and supports a smooth Internet connectivity. A PC terminal may be used for the input/output terminal of the concentrated control management tool 2.

**0027**Although a user should just use it for a public line about TEL-FAX, connecting directly, the number of times for every dial place, etc. are checked by letting the concentrated control management tool 2 pass, and it may be made to offer service etc. which extract the number imposed well and the personal information on the partner point, etc. understand. About an interphone, it can call in each part stores, and may be made to use it as a connecting means of the width which each part stores can connect mutually directly.

**0028**Although the information central control in an ordinary home was explained so far, cannot limit this invention to this and, of course, it can apply also to organization facilities, such as an office, a hotel, accommodations, a hospital, and a school.

**0029**

**Effect of the Invention**CATV according to / as explained above / the invention according to claim 1 in the houses in an office or a home etc., VOD (video on demand), Internet TV which performs video delivery through the Internet by multicasting, Information terminal equipment which can carry out selection reception of much multimedia information, such as CATV which is a system which carries out batch management of two or more information devices of \*\*, and needs conditional receiving functions, such as ID check, VOD, and Internet TV, The information dispensing means for carrying out distribution distribution of the multimedia information which carried out selection reception with information terminal equipment at the corresponding information machines and equipment in a house, The information branching device for carrying out branching distribution of the information distributed to the corresponding information machines and equipment in a house in each room by the information dispensing means via the wiring in a house, The power control means which controls in generalization the power supply of two or more information machines and equipment in a house of each, which can be set in each room via the wiring in a house, in order to attain power-saving, The remote control means which carries out remote control in generalization with the portable device provided with the remote control function in which an individual carries the peripheral equipment connected to two or more information machines and equipment in a house of each which can be set in each room, and the information machines and equipment concerned, Since it has the concentrated control management tool which controlled two or more information machines and equipment in a house of each which can be set in each room by communication line connection, such as LAN, coordinated with each means, and comprised a computer system which carries out central control, The multimedia information which increases into the houses in an office or a home etc., and its information machines and equipment are managed in a unified manner, the information on each part store is delivered and received, and

functional and intelligent service can be provided. According to the invention according to claim 2, a power control means, Since it has the function to coordinate with a concentrated control management tool, to switch on a power supply before transmission and reception of information to each information machines and equipment in a house, and to turn off the power after transmission and reception of information in order to stop standby power requirement, There is an effect in the information machines and equipment in all the houses that it can await, the electric power at the time can be reduced, the power consumption in an office and a home etc. is stopped, and total power-saving can be realized. According to the invention according to claim 3, since it has a monitor means which supervises the situation of each room based on the information on various sensitivity sensors, such as a surveillance camera, smoke, gas, and temperature, in addition to each means, ON recessions in an office and a home etc. can be detected and the required information machines and equipment in a house can also be controlled automatically.

**0030**According to the invention according to claim 4, a remote control means, A remote control signal receiving set receives the remote control signal by the infrared rays or the radio wave sent from the portable device, transmit to a concentrated control management tool, and a concentrated control management tool, Since it controls by transmitting a remote control signal to the information machines and equipment in the house concerned which decoded the inputted remote control signal and of which operation was required by communication line connection, such as LAN, the functional remote control system which combined remote control and communication line connection can be built. According to the invention according to claim 5, a concentrated control management tool, Since it has a location registration function which detects movement of the portable device registered for every individual via the remote control signal receiving set and controls by a location registration function according to the contents which set up beforehand the information machines and equipment in a house in each room according to movement of a portable device, Since it can continue, view and listen to the same program in a movement destination even if it moves a place while a televiewer views and listens to a sports program etc., what overlooks an important scene can be abolished.

**0031**According to the invention according to claim 6, a concentrated control management tool, The operation history of the registrant individual who controlled each information machines and equipment in a house based on the information acquired by the remote control means and the monitor means, Behavior analysis, such as liking, and taste analysis are conducted, and since it has the intelligence function and scheduling function which are made to reflect in the various operations including automation of each information machines and equipment in house, various kinds of intelligent services can be provided from a system. According to the invention according to claim 7, since a concentrated control management tool receives the information from information machines and equipment that detect an individual's operation information via a remote control means, equip with a health check sensor, and detected information is transmitted and performs an individual's health care, it can also manage a user's health by a system. According to the invention according to claim 8, an information branching device, Allot the electric socket which connects a cable etc. to a wall surface, and the long picture type tubular wiring equipments which can accommodate many cables etc. collectively are allocated in Kabeuchi, Since variety-of-information apparatus is wired via the electric socket of each room through tubular wiring equipments from the electric socket in each cable, the wiring in a house is stored to Kabeuchi so that it may not become obstructive, and it can do simply, without the additional work from after also destroying building materials, such as a wall.

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**Field of the Invention**This invention relates to the various functions concentration information management system which carries out central control of the information machines and equipment in a house of much multimedia correspondences.

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**Description of the Prior Art**In paid broadcasting, such as the former, a CATV system, BS broadcasting, and CS broadcasting, Only the specific televiewer who contracted with the

broadcasting organization cancels the scramble of broadcast on which scramble is hung, and conditional limited reception or a conditional access function (CA function) is realized as a function to enable it to view and listen to the broadcast. Such a CA function enciphers the video signal and audio signal of broadcast using a scramble key (scramble), The viewing-and-listening contractor is a mechanism in which the scramble of broadcast which received is canceled, and it can view and listen to actual broadcast by the set top box (a tuner, a decoder, etc. may be called) distributed by the broadcasting organization.

**0003**These days, the system etc. which can view and listen to various kinds of broadcasts by the rather than thing for which CA function is mounted in an IC card and an IC card is substituted according to an entrepreneur are developed for every entrepreneur who digitization is promoted and is building the CATV system using the separate set top box. Various home server systems etc. which are total and furthermore manage these information machines and equipment and home electronics are announced.

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**Effect of the Invention**CATV according to / as explained above / the invention according to claim 1 in the houses in an office or a home etc., VOD (video on demand), Internet TV which performs video delivery through the Internet by multicasting, Information terminal equipment which can carry out selection reception of much multimedia information, such as CATV which is a system which carries out batch management of two or more information devices of \*\*, and needs conditional receiving functions, such as ID check, VOD, and Internet TV, The information dispensing means for carrying out distribution distribution of the multimedia information which carried out selection reception with information terminal equipment at the corresponding information machines and equipment in a house, The information branching device for carrying out branching distribution of the information distributed to the corresponding information machines and equipment in a house in each room by the information dispensing means via the wiring in a house, The power control means which controls in generalization the power supply of two or more information machines and equipment in a house of each, which can be set in each room via the wiring in a house, in order to attain power-saving, The remote control means which carries out remote control in generalization with the portable device provided with the remote control function in which an individual carries the peripheral equipment connected to two or more information machines and equipment in a house of each which can be set in each room, and the information machines and equipment concerned, Since it has the concentrated control management tool which controlled two or more information machines and equipment in a house of each which can be set in each room by communication line connection, such as LAN, coordinated with each means, and comprised a computer system which carries out central control, The multimedia information which increases into the houses in an office or a home etc., and its information machines and equipment are managed in a unified manner, the information on each part store is delivered and received, and functional and intelligent service can be provided. According to the invention according to claim 2, a power control means, Since it has the function to coordinate with a concentrated control management tool, to switch on a power supply before transmission and reception of information to each information machines and equipment in a house, and to turn off the power after transmission and reception of information in order to stop standby power requirement, There is an effect in the information machines and equipment in all the houses that it can await, the electric power at the time can be reduced, the power consumption in an office and a home etc. is stopped, and total power-saving can be realized. According to the invention according to claim 3, since it has a monitor means which supervises the situation of each room based on the information on various sensitivity sensors, such as a surveillance camera, smoke, gas, and temperature, in addition to each means, ON recessions in an office and a home etc. can be detected and the required information machines and equipment in a house can also be controlled automatically.

**0030**According to the invention according to claim 4, a remote control means, A remote control signal receiving set receives the remote control signal by the infrared rays or the radio wave sent from the portable device, transmit to a concentrated control management tool, and a concentrated control management tool, Since it controls by transmitting a remote control signal to the information machines and equipment in the house concerned which decoded the inputted remote

control signal and of which operation was required by communication line connection, such as LAN, the functional remote control system which combined remote control and communication line connection can be built. According to the invention according to claim 5, a concentrated control management tool, Since it has a location registration function which detects movement of the portable device registered for every individual via the remote control signal receiving set and controls by a location registration function according to the contents which set up beforehand the information machines and equipment in a house in each room according to movement of a portable device, Since it can continue, view and listen to the same program in a movement destination even if it moves a place while a televiewer views and listens to a sports program etc., what overlooks an important scene can be abolished.

**0031**According to the invention according to claim 6, a concentrated control management tool, The operation history of the registrant individual who controlled each information machines and equipment in a house based on the information acquired by the remote control means and the monitor means, Behavior analysis, such as liking, and taste analysis are conducted, and since it has the Intelligence function and scheduling function which are made to reflect in the various operations including automation of each information machines and equipment in a house, various kinds of Intelligent services can be provided from a system. According to the invention according to claim 7, since a concentrated control management tool receives the information from information machines and equipment that detect an individual's operation information via a remote control means, equip with a health check sensor, and detected information is transmitted and performs an individual's health care, it can also manage a user's health by a system. According to the invention according to claim 8, an information branching device, Allot the electric socket which connects a cable etc. to a wall surface, and the long picture type tubular wiring equipments which can accommodate many cables etc. collectively are allocated in Kabeuchi, Since variety-of-information apparatus is wired via the electric socket of each room through tubular wiring equipments from the electric socket in each cable, the wiring In a house is stored to Kabeuchi so that it may not become obstructive, and it can do simply, without the additional work from after also destroying building materials, such as a wall.

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**Problem(s) to be Solved by the Invention**However, although the above-mentioned conventional technology described reception of the image sound information by CATV used, for example in a house, While multimedia information etc. increase these days, an increase of the information machines and equipment used for every each part store also in a house (inside of an office and a home, etc.) is enhanced, The cable used since it is a situation where CATV etc. are only one in such an information channel and a data system differs from a protocol etc. for every such information channel, respectively, and the number of connectors also increase, When extreme, there is a problem said that the situation where it is occupied by the cable and a place left to stand does not have above the floor level has occurred. If all the information channels were independently furnished for every room in a house, There is a problem referred to as that the viewpoint of information use to utilization efficiency is bad, and cannot build the relation negotiation of the width between each part stores, etc. easily in the same house, and when it is CATV, One license is supplied to one set top box (a tuner may be called) in many cases, and there is a problem that CATV is seen only in the room where it has the set top box. if \*\* (short) distance radio, such as wireless LAN and Bluetooth, etc. will come to be included in home electronics from now on, the problem of the power consumption at the time of standby also needs to surface, and also with careful attention to the effective use of resources and the generating problem of CO2 in earth environment, it is necessary to aim at energy saving more

**0005**Then, this invention utilizes a remote control system, carries out central control of the multimedia information and information machines and equipment in a house, and distributes and provides multifunctional service in each part store, and. Power-saving is attained by controlling the power supply of each information machines and equipment in generalization, the wiring mechanism which can store collectively many cables of each information channel containing a power connector is functionally allocated in Kabeuchi, and extension of a cable etc. and reduction are also aimed at providing a possible concentration information management system.

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**Means for Solving the Problem** The invention according to claim 1 is provided with the following. CATV in houses in an office or a home etc., VOD (video on demand), It is a system which carries out batch management of two or more information devices, such as Internet TV which performs video delivery through the Internet by multicasting, Information terminal equipment which can carry out selection reception of much multimedia information, such as CATV which needs conditional receiving functions, such as ID check, VOD, and Internet TV.

An information dispensing means for carrying out distribution distribution of the multimedia information which carried out selection reception with said information terminal equipment at corresponding information machines and equipment in a house.

An information branching device for carrying out branching distribution of the information distributed to corresponding information machines and equipment in a house in each room by said information dispensing means via wiring in house, A power control means which controls in generalization a power supply of two or more information machines and equipment in a house of each, which can be set in each room via wiring in said house, in order to attain power-saving, A remote control means which carries out remote control in generalization with a portable device provided with a remote control function in which an individual carries peripheral equipment connected to two or more information machines and equipment in a house of each which can be set in said each room, and the information machines and equipment concerned, A concentrated control management tool which controlled two or more information machines and equipment in a house of each which can be set in said each room by communication line connection, such as LAN, coordinated with said each means, and comprised a computer system which carries out central control.

The invention according to claim 2 is characterized by having a function for said power control means to coordinate with said concentrated control management tool in order to stop standby power requirement, and to switch on a power supply before transmission and reception of information to each information machines and equipment in said house, and to turn off the power after transmission and reception of information. The invention according to claim 3 is characterized by having a monitor means which supervises a situation of each of said room based on information on various sensitivity sensors, such as a surveillance camera, smoke, gas, and temperature, in addition to said each means.

**0007**Said remote control means receives a remote control signal by infrared rays or a radio wave sent from said portable device with a remote control signal receiving set, and transmits the invention according to claim 4 to said concentrated control management tool, It is characterized by said concentrated control management tool controlling by transmitting a remote control signal to information machines and equipment in the house concerned which decoded an inputted remote control signal and of which operation was required by communication line connection, such as LAN. The invention according to claim 5 is provided with a location registration function for which said concentrated control management tool detects movement of said portable device registered for every individual via said remote control signal receiving set, It is characterized by controlling by this location registration function according to contents which set up beforehand information machines and equipment in a house in said each room according to movement of said portable device.

**0008**An operation history of a registrant individual by whom the invention according to claim 6 controlled each information machines and equipment in a house based on information from which said concentrated control management tool was acquired by said remote control means and a monitor means, Behavior analysis, such as liking, and taste analysis are conducted, and it is characterized by having an intelligence function and a scheduling function which are made to reflect in various operations including automation of each information machines and equipment in a house. The invention according to claim 7 is characterized by receiving information from information machines and equipment in a house that said concentrated control management tool detects an individual's operation information via said remote control means, equips with a health check sensor, and transmits detected information, and performing an individual's health care. The invention according to claim 8 allots an electric socket by which said information branching device

connects a cable etc. to a wall surface, A long picture type tubular wiring member which can accommodate many cables etc. collectively is allocated in Kabeuchi, and it is characterized by wiring variety-of-information apparatus via an electric socket of each room through said tubular wiring member from said electric socket in each cable.

**0009**

**Embodiment of the Invention** Hereafter, an embodiment of the invention is described with reference to figures. Drawing 1 is a lineblock diagram of the concentration information management system concerning an embodiment of the invention. Drawing 2 is a figure showing the wiring member of the information branching device shown in drawing 1.

**0010** In drawing 1, 1 is a centralized information management device which carries out batch management of the information in the houses in an office or a home etc. according to a computer system. 2 is a concentrated control management tool and performs central control, such as selection/reception of the information on the various channels of CATV, VOD (video on demand), Internet TV that performs video delivery through the Internet by multicasting, etc., and power control for the information control of the distribution in a house, and power saving. 15 is an input output means for the display which the concentrated control management tool 2 uses for control and surveillance, and various setting out which performs concentrated control management. 3 is information terminal equipment, such as a set top box, an IC card etc. perform selection/reception for every reception channel, and the image etc. which were received here are distributed to TV monitor of each part store, etc. Although CATV, BS/CS, a public line, the Internet, and VOD are illustrated as each channel, it is what was divided and described according to data for convenience, and there is also a case superimposed on CATV like VOD service in practice.

**0011** In 4 is an information dispensing means, for example, the information terminal equipment 3 by CATV reception, As opposed to connecting the coaxial cable drawn in the house from the fiber-optic network, performing signal processing, such as a releasing scramble, and outputting a television signal, Information distribution of the information on the Internet passing the information terminal equipment 3, connecting it to the cable modem for CATV within the information dispensing means 4 with a coaxial cable, and connecting with a LAN cable between a cable modem and an apparatus terminal is performed.

**0012** 6 is wiring in a house which connects the information dispensing means 4 and the information branching device 5, and a coaxial cable, LAN cables (10-/100BASE-T etc.), an IEEE1394 cable, a USB cable, single track, etc. are used according to the kind of information machines and equipment in a house. These mainly comprise a bidirectional transmission type. 5 is an information branching device and constitutes the main part of the wiring in a house. For example, Kabeuchi of the room is piped in the tubular wiring member 20 which stores the various cables 21 collectively to an inside as shown in drawing 2, It attaches so that the connector 23 for cable connection and the electric socket board 22 which has arranged the connector 24 grade for power cables may be exposed on the foot stall inside the room, and the cable connector from the wiring 6 side in a house is connected with the connectors 23 and 24 on the electric socket board 22, and wiring to the information machines and equipment of each part store is performed. The wiring member 20 can be freely detached and attached for every small block of electric socket board 22 grade, and it is constituted so that easily **addition of the distribution cable 21 and \*\*\*\* construction** . 7 is the cables stored by the wiring member 20 piped by Kabeuchi, and shows the wiring for information machines and equipment which constitutes wiring to the information machines and equipment of each part store, and wiring of the power supply (power line).

**0013** 8 is a room of room NO1 and as information machines and equipment in a house The TV monitor 18, PC (personal computer) terminal, A surveillance camera, a smoke sensor, a gas sensor, a thermo sensor, various health check sensors, an interphone, TEL-FAX, and remote control receiving set 16 grade are installed. The power cable (power line) which supplies a power supply to each of these information machines and equipment is allocated by the wiring member 20, the power supply of each information machines and equipment is controlled by the power control means 12 in generalization, control management is carried out by the concentrated control management tool 2, and power-saving is made by it so that standby power requirement may be reduced. The individual is carrying the remote control unit for remote control with which the portable devices 11, such as a portable telephone or PDA, were equipped. The rooms 9-10 of other rooms NO2-NOn are considered as the same composition as room NO1.

**0014**As a remote control unit of the portable device 11, it is equipped with the sender of the remote control signal by infrared rays as an example, and it is assumed that the card slot is also attached (card slots are reading and an object for the writing of the recording card for the health check mentioned later).

**0015**For example, if the remote control signal by infrared rays is sent from the portable device 11 when specifying a channel, volume, etc. which are displayed on the TV monitor 18, After receiving light with the remote control receiving set 16 and changing into an electrical signal, it is transmitted to the concentrated control management tool 2, Signal analysis is conducted by the concentrated control management tool 2, broadcasting channels, such as CATV, VOD, and Internet TV, are chosen if needed, and the electrical signal which orders its operation of channel designation, volume control, etc. via the remote control means 13 is transmitted to the information terminal equipment 3 or the TV monitor 18. In this case, the concentration information control means 2 controls the power supply (power line) of each applicable information machines and equipment, a power supply is switched on before the transmission and reception of information to information machines and equipment if needed, standby power requirement is stopped by turning off the power after the end of transceiver of information, and power-saving is attained.

**0016**Here, the case where the TV monitor 18 cannot receive remote control by communication line connection, such as LAN, directly is explained to an example. The infrared signal transmitter 17 is arranged at the front face of the remote control light-receiving device of the TV monitor 18, If the electrical signal which specifies a change of the channel of a receiver or an external input channel, volume control, etc. with which TV monitor is provided from the concentrated control management tool 2 is transmitted to the infrared signal transmitter 17, The infrared signal transmitter 17 sends channel switching and the infrared remote control signal which specifies volume control, and remote-control operation of the TV monitor 18 by the centralized information management device 1 is carried out. Thus, when it is information machines and equipment which cannot perform remote control by communication line connection directly, the peripheral equipment connected to information machines and equipment or information machines and equipment applicable by passing a communication method and the control machinery for protocol conversion is controlled.

**0017**Operation is explained below. First, if the case where the user of room NO1 views and listens to CATV is taken for an example, A user chooses a program to watch from race cards, such as a broadcasting channel of CATV, VOD, Internet TV, If the key of the remote control unit with which the portable device 11 is equipped is pressed and an infrared remote control signal is sent, the remote control receiving set 16 will receive light, and it will change into an electrical signal, and will transmit to the concentrated control management tool 2. The concentrated control management tool 2 analyzes a remote control signal, finds out the ID number registered into the system, and recognizes it to be a dispatch signal from the portable device 11 of room NO1, The channel of the program for which a user wishes is checked from the program table (it does not illustrate but the same thing as :user's race card is always rewritten) of the memory with which the concentrated control management tool 2 is equipped, The information terminal equipment 3 is ordered the checked channel, it receives, scramble is canceled, and the TV monitor 18 of room NO1 is controlled via the remote control means 13. At this time, transmit the electrical signal which specifies selection of an external channel, volume, etc. to the infrared signal transmitter 17 of the TV monitor 18, an infrared remote control signal is made to send, the TV monitor 18 is operated with an infrared remote control signal, and the program of CATV is received. In this way, by using various kinds of interactive services, the user can receive a desired program from every room. In the case of CATV, the fault of having seen conventionally only in the specific room is cancelable according to 1 set-top-box 1 license.

**0018**In this case, when switching on a power supply and ending program reception conversely, before the concentrated control management tool 2 operates the tuner part (not shown) of the information terminal equipment 3, and the power supply of the TV monitor 18 and sends out control information, after it transmits required information, it is saving the power by turning off and awaiting a power supply and stopping the standby power requirement at the time.

**0019**The concentrated control management tool 2 moves to other rooms on business, while a user views and listens to a sport relay broadcast etc., or, When it goes to a toilet, it has the location registration function for changing as **so that and an important scene may not be overlooked etc. the same program as TV monitor of the place which the user moved automatically**

The concentrated control management tool 2 checks user ID, and is specifically supervising the infrared signal from the remote control unit of the portable device 11, If a user moves to a toilet etc., the remote control signal from the RIKOMON receiving set 16 of room NO1 will disappear, Since the remote control signal which contains user ID from the remote control receiving set of a toilet in the remote control receiving set installed in each part store, a toilet, a bathroom, etc. is inputted, The concentrated control management tool 2 turns off the TV monitor 18 of room NO1, and is realized by the procedure of and passing an identical program. **TV monitor in a toilet** (In addition, of course, such remote control is possible also by a radio wave.) For example, a portable telephone holds the method of the location registration performed by sending an electric wave suitably on a scale of the inside of a house as local location registration, and serves as composition etc. which catch the electric wave of a portable device with the directional antenna of a remote control receiving set, etc.

**0020**The concentrated control management tool 2 creates the viewing history of TV program, etc. for every user, and extracts and analyzes the taste trend of a program, etc., and the intelligence function made to reflect in operation and the scheduling function which records and analyzes an operation history, conducts behavior analysis, and is made to reflect in control of information machines and equipment also have it. For example, when the user always looks at the weather intelligence at 6:50 p.m. every day, even if a user forgets the concentrated control management tool 2 and it does not send a remote control signal, it offers service of at 6:50 p.m., and passing weather intelligence etc. **the TV monitor 18**

**0021**In addition, when a user goes out, it judges by the existence of a remote control signal, and the power supply of unnecessary apparatus is turned OFF automatically. When a user goes home, the monitor means 14 supervises and detects the input from a surveillance camera, a motion sensor, etc., and operation on demand for energy saving of making a power supply one is also performed. When it is preheating of TV monitor, and apparatus into which it is necessary to put a power supply beforehand, such as an air-conditioner, a user's behavior analysis performs synthetic control combining an intelligence function and a scheduling function. When predicting going-home time using the scheduling function by user setting in setting up a hour of rising and using instead of an alarm clock, and switching on a power supply, it is switching on a power supply automatically combining the intelligence function and scheduling function reflecting the user's behavior analysis etc.

**0022**However, although the trial which reduces standby power requirement is made, for example, it may be more convenient for the latest electronic equipment to utilize the timer with which the air-conditioner itself is equipped in an air-conditioner, if the standby power requirement of the whole electronic equipment is added together, it cannot ignore too. Thus, not only information machines and equipment but a kotatsu, an electronic blanket, an electronic carpet, etc., Also in the case of the electrical and electric equipment to preheat beforehand and place, power control is effective, An above-mentioned intelligence function and scheduling function are utilized by installing a power control adapter etc., and, also in the case of kotatsus other than information machines and equipment, an electronic blanket, an electronic carpet, of course, power-saving can be attained in total.

**0023**Next, surveillance business is explained. The concentrated control management tool 2 via the monitor means 14 The image data of a surveillance camera, The data of a smoke sensor, a gas sensor, a thermo sensor, etc. is collected, and image processing of the picture of a surveillance camera is inputted and carried out via a cable as a video data, it is displayed on the monitoring screen of the input output means 15, and supervises an individual's lives, such as a state inside the room, and an invader's existence, and security. It is inputted as an electrical signal, comparison processing is carried out to a reference value, and from the data of a smoke sensor, the data of a smoke sensor or a thermo sensor supervises an outbreak of a fire, the fullness state of poisonous gas, etc., it detects and is careful of the abnormalities in a room temperature from the data of a thermo sensor, and performs an automatic regulation of a central-heating-and-air-conditioning system etc. It may be made for a picture, a sound, a text, etc. to notify to the contact beforehand registered into the case under absence, or the emergency through a public line and the Internet via the information terminal equipment 3.

**0024**Next, about a user's health care, the card which incorporates the data of measuring sensors (health check sensor), such as a pulse, body temperature, and blood pressure, is prepared. A

user's body is equipped with a measuring sensor, data is incorporated into a card, and it inserts in the card slot of the remote control unit with which the portable device 11 is equipped, and via the remote control receiving set 16, data is transmitted to the concentrated control management tool 2, and a user's health check is performed. In particular, to an old person etc., periodically, it considers so that a health check may be carried out (for example, twice of the morning and evening , etc.). The toilet bowl provided with the urinalysis function and the apparatus which stored body measurement functions, such as a pulse, body temperature, and blood pressure, in one are also sold to the noncommercial use, and it may be made to connect such apparatus by a direct communication circuit these days other than the combination of the portable device 11 and a card.

**0025**If the portable telephone in which short-distance-radio connection (bluetooth function etc.) is possible, wireless LAN, etc. can use it convenient in the near future, it will also become possible to transmit data to the concentrated control management tool 2 on radio directly from the portable device 11. In that case, transmission of a picture will also be attained if the broadband type portable telephone which has a video telephone function in the portable device 11 is used. For the concentrated control management tool 2, remote control by radio waves, such as wireless LAN, remote control by the radio wave from the concentrated control management tool 2 to each information machines and equipment, etc. become possible instead of infrared remote control.

**0026**Next, it is not a dial-up method called a public line, a modem, or ISDN and TA about connection of the Internet. The method which connects between cable modems with a PC terminal with a LAN cable using the cable modem of CATV, the method which connects with a LAN cable between PC terminals through a telephone line using an ADSL (asymmetric digital subscriber line) modem or a router, etc. are possible. Since both these methods serve as LAN connection, even if it uses how many set PC terminal in each part store, a modem can be managed with one set, and peripheral equipment, such as a printer and a scanner, sharing of a file, etc. are attained between terminals. The concentrated control management tool 2 performs communication management by the modem or a router, share operation management, such as a printer, etc., and supports a smooth Internet connectivity. A PC terminal may be used for the input/output terminal of the concentrated control management tool 2.

**0027**Although a user should just use it for a public line about TEL-FAX, connecting directly, the number of times for every dial place, etc. are checked by letting the concentrated control management tool 2 pass, and it may be made to offer service etc. which extract the number imposed well and the personal information on the partner point, etc. understand. About an interphone, it can call in each part stores, and may be made to use it as a connecting means of the width which each part stores can connect mutually directly.

**0028**Although the information central control in an ordinary home was explained so far, cannot limit this invention to this and, of course, it can apply also to organization facilities, such as an office, a hotel, accommodations, a hospital, and a school.

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### Brief Description of the Drawings

**Drawing 1**It is a lineblock diagram of the concentration information management system concerning an embodiment of the invention.

**Drawing 2**It is a figure showing the wiring member of the information branching device shown in drawing 1.

### Description of Notations

- 1 Centralized information management device
- 2 Concentrated control management tool
- 3 Information terminal equipment
- 4 Information dispensing means
- 5 Information branching device
- 6 and 7 Wiring in a house
- 8 Room NO1
- 9 Room NO2
- 10 Room NOn

- 11 Portable device
- 12 Power control means
- 13 Remote control means
- 14 Monitor means
- 15 Input output means
- 16 Remote control receiving set
- 17 Infrared signal transmitter
- 18 TV monitor
- 20 Wiring member
- 21 Cable
- 22 Electric socket board
- 23 Connector
- 24 Power connector

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**Drawing 1**

For drawings please refer to the original document.

**Drawing 2**

For drawings please refer to the original document.

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For drawings please refer to the original document.

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